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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,053	07/06/2005	Akira Nakao	074129-0515	2871
7590 Stephen B Machius Foley & Lardner Suite 500 3000 K Street NW Washington, DC 20007-5109				
EXAMINER				
SIMMONS, CHRIS E				
ART UNIT		PAPER NUMBER		
1612				
MAIL DATE		DELIVERY MODE		
05/26/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/517,053

Applicant(s)

NAKAO ET AL.

Examiner

CHRIS E. SIMMONS

Art Unit

1612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-19 is/are pending in the application.
- 4a) Of the above claim(s) 3,4 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-17 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date 10-29-2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicants' arguments, filed 02/25/2009, have been fully considered. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/25/2009 has been entered.

Claim Rejections - 35 USC § 103

Claims 1, 2, 7-17 and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over WO 95/34275 in view of JP 0558861.

Applicant argues that the WO reference teaches away from the invention because of preferred embodiments wherein the particle size is about 20 to 70 microns

and the preferred cellulose is powdered cellulose. Applicant acknowledges, however, that the cellulose material disclosed in the reference also encompasses microcrystalline in addition to powdered cellulose. Applicant argues that the powdered and microcrystalline cellulose have entirely different physical properties and refers to the WO reference as support. The argument that the WO reference teaches away from the invention is not found to be persuasive because the teaching of a preferred embodiment does not constitute a teaching away. The skilled artisan is given the option to choose between 2 types of cellulose material - microcrystalline cellulose and powdered cellulose. Although there are physical differences described in the reference (i.e., powder is more amorphous with higher degree of polymerization), these described differences do not preclude the powdered cellulose or the microcrystalline cellulose from possessing similar "stability over time". Accordingly, the teaching away argument is not found to be persuasive with regard to the reference's *preferred* embodiments being limited to powdered cellulose.

Applicant also asserts that the WO reference teaches away because the preferred particle size in the reference is larger than the particle size instantly claimed for microcrystalline cellulose. This assertion is not persuasive because, although the most preferred particle size range (about 20 to 70 microns) is greater than the claimed particle size range of 2 to 10 microns, another preferred embodiment in the reference (about 10 to 100 microns) overlaps the claimed range and the broadest embodiment completely encompasses the claimed range. Overlapping ranges and ranges in the

prior art that encompass claimed ranges render the claimed ranges *prima facie* obvious. MPEP 2144.05 [R5].

Applicant argues that there are no reasons to combine the references. The examiner disagrees because the primary reference provides a micro-sized microcrystalline cellulose toothpaste composition and the secondary reference provides a means to make a toothpaste composition having smoother properties and thixotropic properties with good dispersibility and shape retention. Additionally, it provides characteristics that are stable to temperature and ion concentration changes; the composition did not cause any sandy feeling inside the mouth and rinsing was found to be excellent. The secondary reference itself provides many reasons to combine the teachings of both references; however, the reasons to combine do not have to be the same as the problem applicant is trying to solve.

Applicant's arguments with regard to the disclosure of Plurionics™ in the WO reference are not deemed to be persuasive. The reference discloses other surfactants other than Plurionics™, in particular, Example 6, at page 19, of the reference reads on the instantly claimed betaine surfactant.

The applicant asserts that the specification discloses unexpected results in Table I. Specifically, applicant argues that the specific surfactant in combination with the microcrystalline with a specific average particle diameter demonstrates unexpected stability over time. The tests used in a comparison must be made under identical conditions except for the novel features of the invention. The claimed invention must be compared, however, with the closest subject matter that exists in the prior art. See

MPEP 712.02(e). It is submitted that the closest prior art subject matter to the claimed invention is found in working Example 6, at page 19 of the WO reference. The example discloses a toothpaste composition comprising 12% by wt. of cellulose and 4.5% by wt. cocoamido propyl betain (surfactant). The prior art is not deficient in the particular claimed surfactant that renders the composition stable over time. Accordingly, any assertion that the specific surfactant is responsible for unexpected stability is not found to be persuasive. The difference between the prior art and the claimed invention is the reference's disclosure of a broader overlapping range in particle size for the crystalline cellulose from about 1 micron to 350 microns, suitably from about 10 microns to about 100 microns, more suitably from about 20 microns to about 70 microns. The difference is not the specific surfactant present in the composition. The comparison in Table I was not made between the instant invention and the closest prior art. Accordingly, the assertion that the unexpected results are dependent on the specific surfactant is not found to be persuasive.

The declaration does not disclose any data or relevance with regard to the specificity of the surfactant. In fact, the declaration uses the claimed surfactants in each experiment. There is no comparison between the claimed surfactant and other surfactants. It does assert, however, that the size of the microcrystalline is responsible for the unexpected results. With regard to the size of the microcrystalline showing unexpected results, as outlined in the 10/01/2008 Office action at the bottom of page 2, the secondary reference already acknowledges that smaller particle sizes increase shape-holding.

Conclusion

No claims are allowed.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRIS E. SIMMONS whose telephone number is (571)272-9065. The examiner can normally be reached on Monday - Friday from 7:30 - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. E. S./
Examiner, Art Unit 1612

/Frederick Krass/
Supervisory Patent Examiner, Art Unit 1612